



A national collaboration of federal, state, local, corporate, non-profit, and academic interests

A subcommittee of the  
Federal Advisory Committee on  
Water Information

SWRR at NREL

National Renewable Energy Laboratory

Golden, Colorado

Tuesday, July 19, 2016

Water & Energy Issues in the West



# SWRR at NREL Agenda

- 9:00 a.m. **Welcome Remarks: Robin Newmark, NREL**
- 9:10 a.m. **Welcome Remarks: Bob Wilkinson SWRR Co Chair,**
- 9:20 a.m. **SWRR Activities & History: David Berry, SWRR Facilitator John Wells, SWRR Co-Chair**
- 9:45 a.m. **Sustainable Water Resource Management (SWARM): Jordan Macknick, NREL**
- 10:30 a.m. **Panel on Produced and Brackish Water: Moderator, ---Mike Hightower, Sandia National Laboratories**  
**Industry Perspectives: Jill Cooper, Anadarko**  
**Advanced Water Treatment: Yuliana Porras, US BuRec**  
**Utilities' Work with Brackish Water: Robert Renner, Water Research Foundation**  
**Brackish Water Assessment: Pete McMahon, USGS**  
**Water & Energy Data, Science, & Policy in New Mexico: Jeri Sullivan Graham, Los Alamos NL**
- 12:30 p.m. **Lunch Speaker Katharine Dahm, Water Resources & Planning Division, US BuRec**  
**Report Underscoring Impacts of Climate Change on Western Water Resources**
- 1:00 p.m. **Panel on Competing Demands for Water: Actions Emerging From the Food/Water/Energy Nexus**  
**Discussions: Moderator, Bob Wilkinson, UCSB**  
**Climate Impacts on Food, Energy, and Water Resources: Kristen Averyt, CU-Boulder:**  
**Climate Impacts on the Energy Sector: Christopher Clack, NOAA**  
**Water Management in the Energy Sector: Rich Belt, Xcel**
- 2:35 p.m. **Panel on Water Sustainability: Moderator, Stan Bronson, Florida Earth Foundation**  
**Innovative water and energy conservation in agriculture:: Reagan Waskom, Col. State U**  
**Snowpack & Water Supply: Ken Nowak, US BuRec R&D**  
**Role of Forest Service in Sustainable Water Resources Mgt: Polly Hays, USFS**  
**Colorado River Basin Salinity Control Program, Robert Boyd, Bureau of Land Mgmt**  
**Sustainability: Present & Future Water Needs & Uses: Tony Willardson, Western States Water Council**
- 4:15 p.m. **Closing Comments**
- 4:20 p.m. **Short tour of NREL Energy Systems Integration Facility**





# **Sustaining Water Resources in the Mid Atlantic Issues, Information, and Innovation**

**Tuesday December 6, 2016**

**University of the District of Columbia, Washington DC**

# Sustaining Water Resources in the Mid Atlantic

## Issues, Information, and Innovation

### Agenda

- 9:00 a.m. **Welcome Remarks.** David Berry, SWRR Facilitator; Tolessa Deksissa, Director, Water Resource Research Institute (WRI); Sabine O'Hara, Dean, College of Agriculture, Urban Sustainability and Environmental Sciences, UDC
- 9:15 a.m. **Sustainable Water Resources Roundtable Activities and History.** Rhonda Kranz, SWRR Steering Committee; Kranz Consulting
- 9:25 a.m. **Round of BRIEF Self-Introductions.** David Berry
- 10:10 a.m. **Managing Water Risk and Resilience in a Changing Climate with 21st Century Data and Information.** Peter Colohan, Director Service Innovation and Partnership, National Weather Service/Office of Water Prediction, NOAA
- 10:50 a.m. **Panel 1. Regional Issues.** Moderator, Lisa Engelman, American Water Resources Association (AWRA)
- Agricultural Impacts and Responses on Our Watersheds. Elizabeth Nicholas, Executive Director, Waterkeepers Chesapeake
- Aquatic Connectivity: Climate Change, Ecological Health, and Infrastructure. Dan Shively, National Fisheries Program Leader, USDA Forest Service
- Chesapeake Bay TMDL Compliance – Stormwater Failures and Stream Restoration in the Built Environment. Joe Berg, Practice Lead for Ecological Restoration, Biohabitats, Inc.
- Q & A Discussion

# Sustaining Water Resources in the Mid Atlantic

## Issues, Information, and Innovation

### Agenda (continued)

12:00 p.m. **Small Group Discussions by Issues over Lunch**

1:20 p.m. **Panel 2. Multi-level Collaborations and Access to Information.** Moderator, Mike Eberle, National Surface Water Program Leader, USDA Forest Service.  
Delaware River Watershed Initiative (DRWI). Carol Collier, Senior Advisor for Watershed Management & Policy, The Academy of Natural Sciences Drexel University  
Unbiased Water Monitoring: Academic and City Collaborations. Tolessa Deksissa, Director, WRRI, University of the District of Columbia  
Data Management & Data Sharing. John Dawes, Exec. Director, Chesapeake Commons  
Q & A Discussion

3:10 p.m. **Panel 3. State and Local Programs and Legislation – Impacts and Transferability.**  
Moderator, Emily Franc, Anacostia Riverkeeper  
The Urban Water Partnership: Baltimore. Mike Galvin, Project Coordinator, Baltimore Field Station, Northern Research Station, USDA Forest Service  
RiverSmart in the District of Columbia: Promoting Stormwater Retention. Jamie Alberti, RiverSmart Homes Program Manager, Alliance for the Chesapeake Bay  
Local Watershed Groups: Advocates, Nudges and Amplifiers of Stormwater and Water Quality Efforts. Kit Gage, President, Friends of Sligo Creek, and Master Watershed Steward  
Q & A Discussion

4:20 p.m. **Open Discussion**

4:30 p.m. **Closing Comments and Adjourn**

4:35 p.m. **Field Trip:** UDC Green Building Tour



Proceedings of the Meeting of the

# Sustainable Water Resources Roundtable

at Florida Gulf Coast University December 14/15, 2016



FLORIDA EARTH  
FOUNDATION

# SWRR

Sustainable Water  
Resources Roundtable





## **Introduction**

- 2 What is the Sustainable Water Resources Roundtable (SWRR)?
- 3 About the Florida Earth Foundation
- 4-6 Agriculture and the City Solutions to Competitions for Water Resources Adam Putnam, Florida Commissioner of Agriculture

## **Babcock Ranch**

- 7-9 Babcock Ranch Orientation, Syd Kitson, CEO of Kitson & Partners, LLP
- 10-12 Using Public-Private Partnerships to Solve Water Challenges, Ernie Cox, President, Family Lands Remembered, LLC.
- 13-14 Solar Energy and Babcock Ranch, Buck Martinez, Sr. Director Project Development, Florida Power & Light Company
- 15-16 Babcock Ranch Concepts As a Model for Replication, Amy Wicks, Kimley-Horn and Associates
- 17 Engineering Considerations at Babcock Ranch - Laura Herrero, Johnson Engineering

## **Panel on State of the Art Water Technologies and Methods**

(Moderated by Robert Wilkinson)

- 18-19 Is Florida Ready for Direct Potable Reuse? Chuck Drake, Board Member, Water Environment Research Foundation, and PG, Tetra, Inc.
- 20-22 Innovation in H<sub>2</sub>O Technologies, Marianna Grossman, Minerva Silicon Valley
- 23-24 Those Amazing Satellites - Cathy Johnson, Catapult Satellite Applications

## **Panel on Water Resource Opportunities from Federal Perspective**

(Moderated by Sandy Wiggins, Principle, Consilience LLP)

- 25-27 EPA -Jeff Lape, Deputy Director, EPA Office of Science & Technology
- 28-30 Reclamation...Managing Water in the West - Yuliana Porros-Mendoza, Advanced Water Treatment Coordinator, US Bureau of Reclamation
- 31-33 USGS -Dorothy SiFuentes, Dorothy Sifuentes, Senior Hydrologist, Florida-Caribbean Water Science Center

## **Lunch Speaker**

- 34 Sensor Technology , Peter Ward, Founder/CEO at Hydrological Services America

## **Breakout Sessions**

- 35 Public-Private Solutions - Denver Stutler, President, Polston Technologies and former Chief of Staff for Governor Jeb Bush
- 36 Florida's Water Challenges - Frank Bernardino, President, Anfield Consulting
- 37 Getting Value from University-Industry Partnerships - Dan Vermeer, Director, Duke University's Center for Energy, Development & the Global Environment (EDGE)
- 38 UF's Water Institute - Tom Frazer, Interim Director, The Water Institute at University of Florida
- 39 Urban Water Management in Cities of the Future - Kebeab Ghebremichael, USF's Patel College for Global Sustainability
- 40 The Water-Energy Nexus - Mike Sole, VP of Environmental Affairs, NextEra

## **Closing**

- 41 Photographs of Speakers
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- 43 List of Registrants, How to Get Involved





Comments on Next SWRR meeting  
in New Orleans Cosponsored by the  
Water Institute for the Gulf (TWIG) &  
the Florida Earth Foundation





## Summary Comments

- SWRR corporate & non government participants want to support programs related to natural resources and the environment (not lobbying but an expert advisory panel)
- SWRR meetings reach new organizations at our meetings. It's clear from this meeting that we can find great topics among our sister ACWI subgroups. We will alert you to upcoming meeting topics.



Questions or Comments?